Public Knowledge

October 2, 2017

Ms. Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, NW
Washington, DC 20554

**Re:** Wireless Telecommunications Bureau and Office of Engineering and Technology Seek Comment on Petitions for Rulemaking Regarding the Citizens Broadband Radio Service, **GN Docket No. 12-354, RM-11788, RM-11789**

Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, *et al*, **GN Docket No. 14-177, IB Docket Nos. 15-256 & 97-95, WT Docket No. 10-112, RM-11664**

Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, *et al*, **GN Docket No. 12-268, ET Docket Nos. 14-165 & 16-56, MB Docket No. 15-146**

Amendment of Parts 2 and 90 of the Commission's Rules To Create a New Frequency Allocation for Wireless Broadband Services, **RM-11715**

Expanding Flexible Use in Midband Spectrum Between 3.7 and 24 GHz, **GN Docket No. 17-183**

Fixed Wireless Communications Coalition, Inc. Request for Modified Coordination Procedures in Bands Shared Between the Fixed Service and the Fixed Satellite Service, **RM-11778**

Dear Ms. Dortch:

On September 28, 2017, Harold Feld and Phillip Berenbroick of Public Knowledge ("collectively, Public Knowledge" or "PK") met with Don Stockdale, Chief, Wireless Telecommunications Bureau (WTB), Alok Mehta, Dana Shaffer, Blaise Scinto, John Suhaubte, Joel Taubenblatt, Paul Powell, Matthew Pearl and Nese Guendelsberger of WTB, Michael Hu of the Office of Engineering and Technology (OET), Jose Albuquerque, Jennifer Gilsenan and Tom Sullivan of the International Bureau (IB), regarding matters in the above-captioned proceedings.

**CBRS**

Public Knowledge explained that the Commission should reject changes to the Citizens Radio Broadband Service licensing rules in the 3.5 GHz band. The record contains diverse and overwhelming opposition to proposals to change the Priority Access License rules as proposed by T-Mobile and CTIA. Further, there is no support in the record for the proposal to eliminate the spectrum allocated for General Authorized Access. Billions of dollars in capital are ready to be invested in the 3.5 GHz band under the current rules. The Commission should not delay putting the band to productive use – by both licensed and unlicensed users – in order to relitigate long-

settled issues that would merely benefit a single business model at the expense of competitors, innovative uses of the spectrum, and the public interest.

Additionally, PK stressed the importance of maintaining diverse and innovative regulatory models. 15 years ago, carriers and experts argued that no one would make significant business investments in unlicensed spectrum. But today, businesses routinely invest billions of dollars in equipment using unlicensed spectrum, relying on unlicensed spectrum for a wide variety of business purposes and network architectures. Had the Commission insisted on listening to incumbent providers on the need for certainty, the widespread reliance on freely accessible spectrum could never have happened.

Similarly, the Commission should balance the concerns expressed by incumbent carriers to transform PALs into traditional licenses optimized for existing LTE use. Given the rapid changes anticipated in the industry expected as a consequence of the shift to 5G, it is ridiculous to assume that carrier need yet more traditional licenses over traditional license areas with expectation of renewal. Indeed, the commission should carefully consider the value of structuring spectrum policy around existing 4G LTE needs and should instead maintain a diversity of approaches. The existing PALs are an excellent example of a place to innovate.

**Midband Spectrum And Rural Broadband**

PK discussed the importance of 6 GHz ("midband") spectrum and two pending Petitions for Rulemaking that have potentially significant impact on the deployment of rural broadband – the Petition of Mimosa Networks to make available 500 MHz at 10-10.5 GHz band for point-to-point backhaul service, and the Fixed Wireless Communications Coalition (FWCC) Petition to make available spectrum in 3.7 GHz-4.2 GHz, and the general future of the 6 GHz band. As always, the Commission must balance between multiple demands. In particular, the Commission has long sought two specific goals. First, the Commission has sought an extended band for contiguous unlicensed spectrum use which would take full advantage of newer Wi-Fi protocols that allow for gigabit throughput. The Commission had initially hoped to use the 5 GHz band for this purpose, but the inability to accommodate DoD uses without DFS continues to break up the channel availability of the band even with the Commission's actions to improve use of the U-NII 1 band. The 6 GHz band therefore creates the best chance of creating a large band of contiguous spectrum which will allow next generation 5G Wi-Fi to be deployed in the United States.

Second, the Commission has consistently sought to enhance the use wireless for the delivery of rural broadband. Both the Mimosa10-10.5 GHz Petition and the FWCC 3.7 GHz Petition offer avenues to achieve this goal. In support of the value of unlicensed for wireless backhaul and rural broadband generally, PK discussed the statement of Ondrej Maly, former member of the Czech Telecommunications Office, describing how the availability of unlicensed spectrum at 10 GHz wireless backhaul enabled the Czech Republic to connect its rural villages using 5 GHz unlicensed spectrum for "last-mile" connectivity. The statement is attached to this *ex parte.*

PK observe that, in balancing where the public interest lies for spectrum management, the Commission must carefully consider how it will achieve the important goals of connecting rural America. Given the vast amount of spectrum already available for LTE 4G, the incremental value of adding still more spectrum for the previous generation of mobile technology is clearly lower than finding some band of spectrum capable of supporting both rural broadband and 5G unlicensed services. If the Commission were to favor allocating 3.7 GHz for additional LTE spectrum, then it should grant the pending petition to open the 10 GHz band. If the Commission cannot open the 10 GHz band for rural backhaul, it should move expeditiously to open the 3.7 GHz band. Again, if not in these bands, where else would the Commission propose to open sufficient capacity to support rural wireless?

Finally, the Commission should reject the use of any overlay auction for clearing the spectrum rights. As demonstrated by the acquisitions of AT&T and Verizon in the Millimeter Bands, secondary markets work far more efficiently than an overlay to clear legacy liensees.

**Spectrum Frontiers/Millimeter Band Rules**

Public Knowledge also urged the Commission to quickly finalize its sharing rules for the 37-37.6 gigahertz frequencies ("Lower 37 GHz Band") proposed in the *Spectrum Frontiers Order* and *FNPRM* that would authorize access to the Lower 37 GHz Band by rule and make the band available to both Federal and non-Federal users on a coordinated, co-equal basis. Finalizing the sharing rules for the band will drive investment and innovation in the Lower 37 GHz Band, which has the potential to bring new, competitive broadband choices to consumers in densely populated areas. The Commission should delay no longer.

PK also urged the Commission to retain the existing spectrum screen.

**TVWS**

Finally, Public Knowledge urged the Commission to ensure three 6 megahertz television channels are left available for use as television white spaces ("TVWS") following the repack of the remaining television broadcasters. The Commission should maintain its rules that enable TVWS devices to operate in Channel 37, as well as within the 600 MHz Band duplex gap. The Commission should also preserve one vacant channel in each market for TVWS use.

**Overall Takeaway: If Not Here, Then Where?**

Consistently, the Commission has recognized the importance of achieving the right mix licensed spectrum, unlicensed spectrum, and new regulatory models to meet the growing and evolving needs for wireless capacity. But in every specific rulemaking, there are always incumbent demands to adopt rules suited to existing business models and incumbent needs.

According to incumbents, it is always a fine idea to do something innovative and different, just not in this *specific* band or specific proceeding for whatever reason can be plausibly argued.

The Commission must ask itself if it will not innovate now, then when? If not in these pending proceedings, then where?

In accordance with Section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed in the above-referenced docket. Please contact me with any questions regarding this filing.

Sincerely,

/s/ Harold Feld

Senior VP
Public Knowledge

cc: Don Stockdale
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